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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,016	01/23/2001	Stanley B. Miller III	500	9290

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EXAMINER

TRAN, SUSAN T

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/768,016	<b>Applicant(s)</b> MILLER ET AL.	
	<b>Examiner</b> Susan T. Tran	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-7,10-12 and 19-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-7,10-12 and 28-46 is/are rejected.
- 7) ☒ Claim(s) 19-27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

This office action is made in view of the Board's decision, in the Remand to the Examiner.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-6, 10-12 and 38-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 7 are indefinite in the phrases, "first basic salt primarily associated with said adsorbent" and "second basic salt primarily associated with said binder" are unclear. It is unclear from reading the specification what is meant by the term "primarily associated". What is meant by the term "primarily associated." Do applicants mean some type of physical bonding of the adsorbent and binder to the first basic salt, and second salt, respectively. If so, what type of binding? Do applicants merely mean mixing the two "primarily associated" components together in the same vessel followed by combination of all four components (adsorbent, first basic salt, binder, second basic salt)? Further clarification is suggested.

Claims 3, 7, 28 and 38 are indefinite in the terms "first basic salt" and "second basic salt" in are unclear. It is unclear whether the claims require that the first and the second basic salts be different salts. On the one hand the applicants appear to use

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different language for the two salts, *i.e.*, "first" and "second" thus requiring two different salts. On the other hand, as noted by the examiner, according to the specification the first basic salt and the second basic salt may be selected from the same Markush group of salts, *e.g.*, sodium and potassium carbonates and bicarbonates. See also, claim 5.

Claim 39 is indefinite in the phrase "means plus function" format. 35 U.S.C. § 112, sixth paragraph. To satisfy the requirements of 35 U.S.C. § 112, second paragraph, when 35 U.S.C. § 112, sixth paragraph, is invoked, the corresponding structures must be described in the specification. In claim 39, the phrases "first blended mixture means for absorbing an acid-gas by converting said acid gas into a salt and carbon dioxide and water which is adsorbed by an adsorbent therein for subsequent evaporation to the atmosphere", and "second blended mixture means including a binder for binding said second blended mixture means with said first blended mixture means," are unclear. It is unclear whether the "first blended mixture means for absorbing" and the "second blended mixture means including a binder for binding said second blended mixture means with said first blended mixture means" must necessarily include first and second basic salts to function according to the claim, or whether the "blended mixture means for absorbing", need only include the adsorbent, and the "second blended mixture means" need only include the binder. Further clarification is suggested.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6 and 38-46 rejected under 35 U.S.C. 103(a) as being unpatentable over Tuma et al. US 6,146,446.

Tuma teaches shaped adsorbent articles useful in electronic device (see abstract). The article comprising mixtures of adsorbent materials includes activated carbon, silica gel, calcium carbonate, potassium carbonate, potassium permanganate, calcium sulfate, and sodium carbonate; and binder includes microcrystalline cellulose, starch, sodium silicate, and polyvinylpyrrolidone (columns 5-6). The adsorbent article can be formed using compression molding or tablet-forming method (id, column 9, lines 47-62). Tuma does not teach first acid salt being primarily associated with the adsorbent, and second acid salt being primarily associated with the binder. However, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Thus, it would have been obvious for one of ordinary skill in the art to, by routine experimentation determine

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a suitable method with the expectation of at least similar result, because Tuma teaches an adsorbent article for the same purpose desired by the applicant, e.g., adsorbent article used in electronic devices to adsorb acid gas.

Claims 3-6 and 38-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuma et al. US 6,146,446, and McLaughlin et al. US 4,395,347.

Tuma is relied upon for the reason stated above. Although Tuma is relied upon for the teaching of mixture of materials, such as activated carbon, silica gel, calcium carbonate, potassium carbonate, sodium carbonate, Tuma is silent as to the teaching of mixture of the basic salts.

McLaughlin teaches blends of inorganic salts, including carbonates and bicarbonates basic salts are useful in absorbing the liquid components (column 2, lines 48-65). Thus, it would have been obvious for one of ordinary skill in the art to, by routine experiment modify the absorbent article of Tuma using the mixture of basic salts taught by Osborne, because the references teach that mixture of basic salts can be used to absorb liquid components.

Claims 3-6 and 38-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuma et al. US 6,146,446, and Tanzer et al. US 5,037,412.

Tuma is relied upon for the reason stated above. Although Tuma is relied upon for the teaching of mixture of materials, such as activated carbon, silica gel, calcium

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carbonate, potassium carbonate, sodium carbonate, Tuma is silent as to the teaching of mixture of the basic salts.

Tanzer teaches an absorbent article comprising mixture of basic salt, including carbonates and bicarbonates (column 5, lines 25-32). Thus, it would have been obvious for one of ordinary skill in the art to, by routine experiment modify the absorbent article of Tuma using the mixture of basic salts taught by Tanzer, because the references teach that mixture of basic salts is useful in absorbent article.

Claims 7, 10-12 and 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuma et al. US 6,146,446, and Osborne et al. US 4,855,276.

Tuma is relied upon for the reasons stated above. Tuma is silent as to the limitation of second basic salt is associated with the binder. However, it is the position of the examiner that one of ordinary skill in the art would by routine experimentation determine a suitable process with the expectation of at least similar result, because Tuma teaches the use of adsorbent article containing the same material, same shape, and for the same purpose, absorbing acid gas to protect electronic devices from contaminants.

Tuma is silent as to the teaching of sodium or potassium bicarbonate.

Osborne teaches adsorbent composition comprising activated carbon powder, activated alumina, water, and sodium bicarbonate (columns 5-6). Thus, it would have been prima facie obvious for one of ordinary skill in the art to prepare Tuma's adsorbent article using basic salts taught by Osborne, because the references suggest the use of

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basic salts in adsorbent composition to filter fluid, such as air within electronic devices.

The expected result would be an adsorbent article in a variety of shapes useful to be placed in smaller spaces, such as disk drives.

### ***Claims Allowable***

Claims 19-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claims Cancelled***

Applicants have withdrawn claims 47 and 48 from appeal. Brief, page 1.  
Accordingly, claims 47 and 48 are cancelled. See M.P.E.P §§ 1214.05 and 1215.03.

### ***Correspondence***

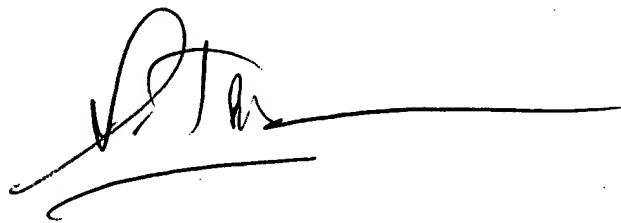
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan T. Tran whose telephone number is (571) 272-0606. The examiner can normally be reached on Monday through Thursday 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'S. Tran', with a long horizontal line extending to the right.

Susan T. Tran  
Examiner  
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